

REMARKS

This paper is presented in response to the Office Action. No claims are canceled, amended or added by this paper. Claims 1-30 remain pending.

Reconsideration of the application is respectfully requested in view of the following remarks. For the convenience and reference of the Examiner, Applicants' remarks are presented in the order in which the corresponding issues were raised in the Office Action.

I. General Considerations

a. claim amendments and/or cancellations

Applicants submit that none of the claim amendments, claim cancellations or statements that have been, or may be, advanced by the Applicants in this or any related case, constitute or should be construed as, an implicit or explicit surrender or disclaimer of claim scope with respect to the cited, or any other, references.

b. remarks

Applicants respectfully note that the remarks herein do not constitute, nor are they intended to be, an exhaustive enumeration of the patentable distinctions between any cited references and the invention, example embodiments of which are set forth in the claims of this application. Rather, and in consideration of the fact that various factors make it impractical to enumerate all the patentable distinctions between the invention and the cited art, as well as the fact that the Applicants has broad discretion in terms of the identification and consideration of the base(s) upon which the claims distinguish over the cited references, the distinctions identified and discussed herein are presented solely by way of example. Consistent with the foregoing, the discussion herein is not intended, and should not be construed, to prejudice or foreclose contemporaneous or future consideration by the Applicants, in this case or any other, of: additional or alternative distinctions between the invention and the cited references; and/or, the merits of additional or alternative arguments.

Applicants note as well that the remarks, or a lack of remarks, set forth herein are not intended to constitute, and should not be construed as, an acquiescence, on the part of the Applicants: as to the purported teachings or prior art status of the cited references; as to the characterization of the cited references advanced by the Examiner; or as to any other assertions, allegations or characterizations made by the Examiner at any time in this case. Applicants reserve the right to challenge the purported teachings and purported prior art status of the cited references at any appropriate time.

II. Claim Rejections under 35 USC § 102

Applicants respectfully note that a claim is anticipated under 35 U.S.C. § 102(a), (b), or (e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Further, the identical invention must be shown in as complete detail as is contained in the claim. Finally, the elements must be arranged as required by the claim. *Manual of Patent Examining Procedure* (“MPEP”) § 2131.

Turning now to the Office Action, the Examiner has rejected claims 1-7, 13-20, 25-27 and 30 (claims 1, 14 and 25 are the pending independent claims) under 35 U.S.C. § 102(b) in view of US 5,850,422 to Chen (“Chen”). For at least the reasons set forth below, Applicants respectfully disagree.

a. **claims 1-7 and 13**

Applicants respectfully submit that the rejection advanced by the Examiner is problematic for a variety of reasons, some of which are addressed in the following discussion. For example, while the Examiner has alleged that *Chen* discloses a circuit “...for multiplexing a plurality of data signals (36) into an output data stream...” (Office Action at 2), the portions of *Chen* cited by the Examiner do not appear to support that characterization. Particularly, *Chen* refers to element 36 as being singular, i.e., “incoming data stream 36” (col. 4, lines 16-17) and not in the plural form, i.e., “data signals,” as the Examiner has alleged.

As well, the Examiner has alleged that reference “36” of *Chen* refers both to “data signals” and a “circuit element.” *Office Action* at 2. It appears to Applicants, at present, that the Examiner may have meant to refer to “data signals” rather than to a “circuit element.” However, Applicants respectfully request that the Examiner provide suitable clarification on this point.

Further, while the Examiner has alleged that *Chen* discloses a “transition of each circuit element,” the cited passages of *Chen* do not recite the word “transition” nor is it clear to Applicants what aspect of *Chen* the Examiner believes to correspond to the claimed “transition of each circuit element.”

As a further example of the discontinuity between the allegations of the Examiner and the disclosure of the cited portions of *Chen*, Applicants note that while the Examiner has referred to “OP0 to OP9” as “individual data signal[s] of said plurality of data signals”, *Chen* indicates that OP0 to OP9 are “output signal lines” that are each associated with a corresponding “clock phases” OP0 – OP9. *Col. 4, line 55. Emphasis added.* Correspondingly, it is unclear to Applicants as to what the basis is for the assertion of the Examiner that such “clock phases” constitute “data signals.” Along the same lines, Applicants note that claim 1 recites “...an individual data signal of said plurality of data signals...” (emphasis added). In relation to this recitation of claim 1, the Examiner has referred, apparently, to reference “36” of *Chen* as corresponding to the “plurality of data signal[s]” (*Office Action* at 2) while later asserting that “OP0 to OP9” of *Chen* are the individual data signals (*Office Action* at 2). Notwithstanding, the Examiner has not cited any portion of *Chen*

in support of the Examiner's allegation that "OP0 – OP9" are individual data signals of the "incoming data stream 36."

Applicants note further that the Examiner has alleged that "...Chen discloses a circuit...for multiplexing a plurality of data signals (36)..." However, the passages cited by the Examiner do not appear to recite the multiplexing of data signals.

As well, Applicants note that the Examiner has referred to *Chen* as disclosing a "...first clock signal substantially in-phase with said transition..." and a "second clock signal." *Office Action* at 2-3. However, it is not clear to Applicants which portion(s) of *Chen* the Examiner believes to constitute such "first clock signal" and "second clock signal." Bearing in mind the other characterizations advanced by the Examiner, it would seem that it is the opinion of the Examiner that none of OP0 – OP9 corresponds to the "first clock signal" or the "second clock signal" since the Examiner has characterized those as corresponding to the recited "data signals" (see *Office Action* at 2).

With continued reference to selected inconsistencies between the allegations of the Examiner and the disclosure of the cited portions of *Chen*, Applicants note that the Examiner has alleged that *Chen* discloses "...a selector (16,52) coupled to said plurality of circuit elements for sequentially selecting each of said individual data signals to generate said output data stream..." *Office Action* at 3. *Emphasis added.* In contrast with the allegations of the Examiner however, Figure 1 and col. 5, lines 16-17 of *Chen* indicate that the output of the "Clock MUX 16" (characterized by the Examiner as a "selector") is "recovered clock 48" ("re-timed data" is output by "Lead/Lag Phase Detector 18" – see Fig. 1).

In view of the discussion set forth herein, Applicants respectfully submits that the Examiner has failed to establish that *Chen* anticipates claims 1-7 and 13, at least because the Examiner has not shown that each and every element as set forth in claim 1 is found in *Chen*, because the Examiner has not shown that the identical invention is disclosed in *Chen* in as complete detail as is contained in claim 1, and because the Examiner has not shown that *Chen* discloses all the elements of claim 1 arranged as required by that claim. Applicants thus respectfully submit that the rejection of claims 1-7 and 13 should be withdrawn.

b. claims 14-20

In rejecting independent claim 14, the Examiner has alleged that *Chen* discloses "...a method for multiplexing a plurality of said data signals into an output data stream..." *Office Action* at 4. However, the cited passages make no reference to multiplexing of data but refer, instead, to a "clock multiplexer 16" and "clock phases." See, e.g., *col. 4, lines 1-3*. As noted elsewhere herein, it would thus appear that the Examiner has characterized the "clock phases" of *Chen* as corresponding to the claimed "data signals." However, *Chen* explains that "The one output signal line OP0-OP9 that does switch to a logic 1 indicates to the clock multiplexer 16 which one of the ten clock phases P0-P9 should be initially selected via the select

signal lines S0-S9 as the recovered clock signal 48...” *Col. 5, lines 2-6. Emphasis added. Chen* explains further that the clock multiplexer is “...for generating a recovered clock signal.” *Col. 2, lines 46-49. Emphasis added.* As well, *Chen* draws a distinction between “clock” and “data,” referring to “... the embedded clock signal in the incoming data stream 36 and the recovered clock 48...” (*col. 5, lines 15-17, emphasis added*). In light of these points, Applicants submit that the apparent allegation of the Examiner that the “clock signals” of *Chen* correspond to the claimed “data” is inconsistent with the disclosure in the cited portions of *Chen*. Finally, the Examiner has not cited any portion of *Chen* as teaching or suggesting that the “Re-Timed Data” output of component 10 constitutes multiplexed data.

In view of the foregoing points, Applicants respectfully submit that the Examiner has not established that *Chen* discloses “...a method for multiplexing a plurality of data signals into an output data stream...” (Office Action at 4).

As well, the Examiner has also failed to specifically identify which portion(s) of *Chen* allegedly correspond to the claimed “transitions of said data signal.” Instead, the Examiner has simply made non-specific references to various passages of *Chen*. Moreover, the allegation of the Examiner, as presently understood, that *Chen* discloses “clocking said circuit elements with said first clock signal to control said transitions of said data signal” (Office Action at 4, emphasis added) is illogical, since one of those “circuit elements” (as characterized by the Examiner), i.e., “Analog PLL 12,” is the device that actually generates the clocks. Particularly, *Chen* notes that Analog PLL 12 “generates high-speed clocks for the transmit path...” *Col. 3, lines 64-66.*

In view of the discussion set forth herein, Applicants respectfully submit that the Examiner has failed to establish that *Chen* anticipates claims 14-20, at least because the Examiner has not shown that each and every element as set forth in claim 14 is found in *Chen*, because the Examiner has not shown that the identical invention is disclosed in *Chen* in as complete detail as is contained in claim 14, and because the Examiner has not shown that *Chen* discloses all the elements of claim 14 arranged as required by that claim. Applicants thus respectfully submit that the rejection of claims 14-20 should be withdrawn.

c. claims 25-27 and 30

Similar to claim 1, discussed above, independent claim 25 recites a “transition of each circuit element,” “first clock signal,” “second clock signal,” “an individual data signal of a plurality of data signals,” and a “selector...[which generates] said output data stream.” Applicants thus submit that the rejection of claim 25 is not well taken for at least the reasons set forth above in connection with the discussion of claim 1, and the attention of the Examiner is respectfully directed to such discussion. Applicants further submit that the rejection of claims 25-27 and 30 should be accordingly withdrawn.

III. Claim Rejections under 35 USC § 103

The Examiner has rejected claims 8-12, 21-24, 28 and 29 under 35 USC § 103(a) over *Chen* in view of US 6,917,660 to Song ("*Song*"). Applicants respectfully disagree.

Applicants note that by virtue of their dependence from one of claims 1, 14 or 25, each of claims 8-12, 21-24, 28 and 29 requires all the elements of one of those independent claims. As noted herein however, the Examiner has not shown that *Chen*, *Song* and/or any other reference(s), considered alone or in combination, teaches all the elements of claims 1, 14 and 25.

Applicants thus submit that the Examiner has failed to establish a *prima facie* case of obviousness with respect to claims 8-12, 21-24, 28 and 29, at least because the Examiner has not shown that the references, when combined in the allegedly obvious fashion, teach or suggest all the elements of those claims. Applicants thus respectfully submit that the rejection of claims 8-12, 21-24, 28 and 29 should be withdrawn.

CONCLUSION

In view of the remarks submitted herein, Applicants respectfully submit that each of the pending claims 1-30 is in condition for allowance. Therefore, reconsideration of the rejections is requested and allowance of those claims is respectfully solicited. In the event that the Examiner finds any remaining impediment to a prompt allowance of this application that could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate the same with the undersigned attorney.

Dated this 29th day of May 2008.

Respectfully submitted,

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